

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Lu et al. Art Unit : 1648
Serial No. : 10/728,195 Examiner : Bo Peng
Filed : December 3, 2003 Conf. No. : 7308
Title : POLYVALENT, PRIMARY HIV-1 GLYCOPROTEIN DNA VACCINES AND
VACCINATION METHODS

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed after a first Office action on the merits, but before receipt of a final Office action or a Notice of Allowance.


The fee in the total amount of \$180 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization.

Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 17738-003001.

Respectfully submitted,

Date:

7/11/2006


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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17738-003001	Application No. 10/728,195
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Lu et al.	
		Filing Date December 3, 2003	Group Art Unit 1648

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	A1						

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	B1							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	C20	Ljungberg et al., "Enhanced immune responses after DNA vaccination with combined envelope genes from different HIV-1 subtypes," Virology 302(1):44-57 (2002)
	C21	Lu et al., "Immunogenicity of DNA vaccines expressing human immunodeficiency virus type 1 envelope glycoprotein with and without deletions in the V1/2 and V3 regions," AIDS Res. Hum. Retroviruses 14(2):151-5 (1998)
	C22	Lu et al., "Simian immunodeficiency virus DNA vaccine trial in macaques," J. Virol. 70(6):3978-991 (1996)
	C23	MacGregor et al., "First human trial of a DNA-based vaccine for treatment of human immunodeficiency virus type 1 infection: safety and host response," J. Infect. Dis. 178(1):92-100 (1998)
	C24	Mascola et al., "Immunization with envelope subunit vaccine products elicits neutralizing antibodies against laboratory-adapted but not primary isolates of human immunodeficiency virus type 1. The National Institute of Allergy and Infectious Diseases AIDS Vaccine Evaluation Group," J. Infect. Dis. 173:340-348 (1996)
	C25	Mascola, et al., "Human immunodeficiency virus type 1 neutralization measured by flow cytometric quantitation of single-round infection of primary human T cells," J. Virol. 76(10):4810-21 (2002)
	C26	McMichael and Hanke, "The quest for an AIDS vaccine: is the CD8+ T-cell approach feasible?" Nat. Rev. Immunol. 2(4):283-91 (2002)
	C27	Montefiori et al., "Evaluation of antiviral drugs and neutralizing antibodies to human immunodeficiency virus by a rapid and sensitive microtiter infection assay," J. Clin. Microbiol., 26:231-237 (1988)
	C28	Pal et al., "Immunization of rhesus macaques with a polyvalent DNA prime/protein boost human immunodeficiency virus type 1 vaccine elicits protective antibody response against simian human immunodeficiency virus of R5 phenotype," Virology (2006 Feb 2)
	C29	Qiu, et al., "Enhancement of primary and secondary cellular immune responses against human immunodeficiency virus type 1 gag by using DNA expression vectors that target Gag antigen to the secretory pathway," J. Virology. 74(13):5997-6005 (2000)
	C30	Rencher and Hurwitz, "Effect of natural HIV-1 envelope V1-V2 sequence diversity on the binding of V3-specific and non-V3-specific antibodies," J. Acquir. Immune Defic. Syndr. Hum. Retrovirol. 16(2):69-73 (1997)

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	C31	Rencher et al., "Does the key to a successful HIV type 1 vaccine lie among the envelope sequences of infected individuals?" AIDS Res. Hum. Retroviruses 11(9):1131-3 (1995)
	C32	Richmond et al., "Screening of HIV-1 Env glycoproteins for the ability to raise neutralizing antibody using DNA immunization and recombinant vaccinia virus boosting," Virology 230(2):265-74 (1997)
	C33	Robinson, "DNA vaccines for immunodeficiency viruses," AIDS 11(Suppl A):S109-19 (1997)
	C34	Stambas et al., "Long lived multi-isotype anti-HIV antibody responses following a prime-double boost immunization strategy," Vaccine 23(19):2454-64 (2005)
	C35	Takahashi et al., "Induction of CD8+ cytotoxic T cells by immunization with purified HIV-1 envelope protein in ISCOMs," Nature 344:873-75 (1990)
	C36	Vitiello et al., "Development of a lipopeptide-based therapeutic vaccine to treat chronic HBV infection. I. Induction of a primary cytotoxic T lymphocyte response in humans," J. Clin. Invest. 95:341-49 (1995)
	C37	Wang et al., "Polyvalent HIV-1 Env vaccine formulations delivered by the DNA priming plus protein boosting approach are effective in generating neutralizing antibodies against primary human immunodeficiency virus type 1 isolates from subtypes A, B, C, D and E," Virology (2006 Apr 6)
	C38	Weber et al., "Neutralization serotypes of human immunodeficiency virus type 1 field isolates are not predicted by genetic subtype. The WHO Network for HIV Isolation and Characterization," Virol. 70: 7827-832 (1996)
	C39	
	C40	

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